

Model FG3C
Function Generator

Function Generator



- Square, Triangle, Sine waves, TTL and CMOS pulse outputs
- 0.3 Hz to 3 MHz range
- Linear or logarithmic sweep
- Amplitude or frequency modulation
- Built-in 150 MHz frequency counter with 6 digit LED display
- Voltage controlled frequency (VCF) input
- Two switchable 20 dB attenuators
- Signal polarity invert button
- Variable duty-cycle
- Variable DCV offset

FG3C Specifications *(at 23 °C; ≤ 70 % R.H.)*

Main	
Frequency Range	0.3 Hz to 3 MHz (7 ranges)
Amplitude	> 10 Vpp (into 50 Ω load)
Impedance	50 Ω ± 10 %
Attenuator (knob)	-20 dB ± 1 dB
Attenuator (button)	-20 dB ± 1 dB
DC Offset	< -5 V to > +5 V (into 50 Ω load)
Duty-Cycle Control	80 %:20 %:80 % to 1 MHz; continuously variable
Range Accuracy	± 5 %, +1 Hz (@ 3.0 position)
Sine Wave	
Distortion	≤ 1 %, 0.3 Hz to 200 kHz THD < 35 dB below fundamental in all ranges (Specification applied from MAX. to 1/10 level)
Flatness	< 0.3 dB, 0.3 Hz to 300 kHz; < 0.5 dB, 300 kHz to 3 MHz;
Triangle Wave	
Linear	≥ 98 %, 0.3 Hz to 100 kHz; ≥ 95 %, 100 kHz to 3 MHz
Square Wave	
Symmetry	± 2 %, 0.3 Hz to 100 kHz
Rise or Fall Time	< 100 ns at maximum output (into 50 Ω load)
CMOS Output	
Level	4 Vpp, ± 1 Vpp to 14.5 Vpp ± 0.5 Vpp adjustable
Rise or Fall Time	≤ 120 ns
TTL Output	
Level	≥ 3 Vpp
Fan Out	20 TTL load
Rise or Fall Time	≤ 25 ns
VCF	
Input Voltage	-10 V to + 10 V, ± 1 V (100:1)
Input Impedance	10 kΩ, ± 10 %
GCV	
Output Voltage	0 to 2 V DC, relative to frequency setting of range
Sweep Operation	
Sweep/Manual	Switch selector
Sweep/Rate	100:1 ratio maximum, adjustable
Sweep/Time	0.5 sec. to 30 sec. adjustable
Sweep/Mode	Lin./Log. switch selector
Amplitude Modulation	
Depth	0 to 100 %
Modulation Frequency	400 Hz (INT), DC to 1 MHz (EXT)
Carrier BW	100 Hz to 3 MHz (-3 dB)
EXT Sensitivity	≤ 10 Vpp for 100 % modulation
Frequency Modulation	
Deviation	0 to ± 5 %
Modulation Frequency	400 Hz (INT), DC to 20 kHz (EXT)
EXT Sensitivity	≤ 10 Vpp for 10 % modulation
Frequency Counter	
Internal/External	Switch Selector
Range	0.3 Hz to 3 Mz Internal; 5 Hz to 150 MHz External
Accuracy	Time base accuracy ±1 count
Time Base	±10 ppm (23°C, ± 3 °C), after 30 min. warm-up)
Resolution	10 nHz (1 Hz range); 1 kHz (100 MHz range)
Input Impedance	1 MΩ /150 pF
Sensitivity	≤ 35 mVrms (5 Hz to 100 MHz) ≤ 45 mVrms (100 MHz to 150 Mhz)



Model FG3C
Function Generator

Function Generator

General Specifications

Display: 6 digit; green LED, 7.6 mm (0.3˝) high; **Power Source:** 115 VAC or 230 VAC, ± 15 %; 50/60 Hz; **Operating Environment:** For indoor use, altitude up to 2000 M., 0 °C to 40 °C, 80 %R.H.; **Storage Environment:** -10 °C to 70 °C @ 70 % R.H.; **Dimensions (W x H x D):** 243 mm x 93 mm x 292 mm; **Weight:** 2.2 kgs (4.8 lbs); **Safety Approvals:** EN61010-1, Cat. II, Pollution degree 2; **Warranty:** One-year



Meterman.
The right tool for the job.™

Meterman Test Tools
website: www.metermantesttools.com
email: info@metermantesttools.com

6920 Seaway Blvd.
Everett, WA 98203
fax: 425-446-4882
tel: 877-596-2680

Meterman Test Tools Europe
P.O. Box 1186
5602 BD Eindhoven
The Netherlands

Printed in U.S.A. 1/2002 1572140 D-ENG-N Rev A